

URBAN DISTRICT COUNCIL OF
CHESTER-LE-STREET

REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1948

JOHN DOWNIE TRAIL, M.B., Ch B. (Aberdeen)
D.P.H. (Aberdeen).

NOEL WILSON,
Chester-le-Street,

1949,


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COUNCIL CHAMBERS,
CHESTER-LE-STREET,

31st July, 1949.

*To the Chairman and Members of the Chester-le-Street
Urban District Council.*

LADIES AND GENTLEMEN,

I have the honour to submit my eleventh Annual Report on the Health, Vital Statistics and Sanitary Circumstances of your Area for the year 1948, which is prepared in accordance with the lines laid down in Circulars 170/46 and 3/49 of the Ministry of Health.

During the year under review important and widespread changes have occurred in the Health Services under the National Health Service Act, 1946, which came into operation on the 5th July, 1948.

Progress continues with regard to Diphtheria Immunisation which is now the sole responsibility of the Local Health Authority, i.e., the Durham County Council, and the downward trend in Diphtheria notifications has continued, with no deaths in the area.

Responsibility for the operation of the Tuberculosis Service has now been transferred to the Regional Hospitals Board. There is still a continued need for national research and the pasteurisation of milk on a wide-spread scale. In this connection the Milk (Special Designations) Bill, which had its second reading in the House of Commons on February 21st, 1949, will, when its effects reach full fruition, and this may take some years, be a reform of the greatest social significance and a great step forward in the eradication of Tuberculosis of Bovine origin. It is useful to remember too that even now some 70% of the milk sold for human consumption in this country is subject to some form of Heat Treatment.

The Mass Miniature Radiography Unit continues to function efficiently. The scheme of financial allowances for cases of Tuberculosis under the Ministry of Health Memorandum 266T is now under the National Assistance Board.

The Infantile Mortality Rate, and the Birth and Death Rates are considered satisfactory.

Acknowledgement is accorded to all members of the Council for their encouragement and support, to the staff for its loyal co-operation and in particular to Mr. George C. Banks, Sanitary and Housing Inspector. His assistance in the preparation of this report deserves especial reference, and the section dealing with the Sanitary Circumstances of the area has been, as in previous years, almost entirely his own production.

I am, Mr. Chairman and Members,
Your obedient Servant,

JOHN DOWNIE TRAIL,
Medical Officer of Health.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY

Medical Officer of Health—

JOHN DOWNIE TRAIL, M.B., CH.B (ABD.), D.P.H. (ABD.).

The Medical Officer of Health holds the combined appointments of Chest Physician for the Durham County Council, and that of part-time Medical Officer of Health for the Chester-le-Street Urban District Council.

Sanitary Inspector—

GEORGE C. BANKS, L.L.C.Com, C.R.S.A. (Common Law).

The Sanitary Inspector is a whole-time Officer and holds the Sanitary Inspector's certificate, the Meat and Other Food Inspector's certificate, and the certificate in Sanitary Science as applied to Public Works and Buildings of the Royal Sanitary Institute. The Diploma in Cattle, Meat and Food Inspection of Liverpool University and also the Diploma of the Institute of Public Health and Hygiene.

Housing and Shops Inspector—

GEORGE C. BANKS, L.L.C.Com., C.R.S.A. (Common Law).

The Ministry of Health contributes half the salaries of the Medical Officer and the Sanitary Inspector.

HIGHWAYS AND SANITARY (PUBLIC HEALTH) COMMITTEE, 1948

Coun. N. Holyoake (<i>Chairman</i>).	Coun. J. Powney.
Coun. J. Miller.	Coun. J. Hutchinson.
Coun. R. Moist.	Coun. C. G. Widdas.
Coun. S. Usher, J.P.	Coun. C. Fenner.
Coun. E. Reeve, J.P.	Coun. J. Willis.
Coun. L. Usher, J.P.	Coun. T. D. Fuge.
Coun. G. A. Gilchrist, J.P.	Coun. Mrs. E. Brighton.
Coun. C. F. C. Lawson.	Coun. Mrs. N. A. Hearn.
	Coun. Mrs. D. Riddell.

STATISTICS AND LOCAL CONDITIONS OF THE AREA

The District has an area of 2,647 acres with a total population at mid-year, 1948, of 18,620.

The number of inhabited houses at 31st March, 1949, was 5,174.

The actual product of the penny rate for the year ended 31st March, 1948, was £295/4/8, and for the same period the rateable value was £79,460.

The number of inhabited houses at 31st March, 1949, was as follows:—

Terrace Houses	...	...	...	...	...	2441
Detached Houses	...	...	...	...	...	111
Semi-detached Houses	...	...	...	...	...	845
Farm Houses and Cottages	...	...	...	...	...	16
Houses and Shops combined	...	...	...	...	...	60
Council Houses	...	...	...	...	...	1701
Total	...	...	...	...	...	5174

EXTRACTS FROM VITAL STATISTICS

	<i>Total</i>	<i>Male</i>	<i>Female</i>
Live Births: Legitimate	317	159	158
Illegitimate	12	2	10
Birth Rate per 1,000 of the estimated population	...	...	17.6
Still Births	6	1	5
Rate per 1,000 (live and still) births	...	...	17.9
Deaths	201	120	81
Death Rate per 1,000 of the estimated population	...	...	10.7

Deaths from Puerperal Causes

Puerperal Sepsis	...	...	...	...	...	Nil
Other Puerperal Causes	...	...	...	...	...	Nil
Total	...	...	...	...	...	Nil

Rate per 1,000 (Live and Still) Births—0.00

Death Rate of Infants under one year of age

All infants per 1,000 live births	...	...	...	...	48.6
Legitimate infants per 1,000 legitimate births	...	...	...	...	44.1
Illegitimate infants per 1,000 illegitimate births	...	...	...	...	16.4
Deaths from Measles (all ages)	...	...	...	...	Nil
Deaths from Whooping Cough (all ages)	...	...	...	...	Nil
Deaths from Diarrhoea (under two years)	...	...	...	...	Nil

Birth Rate

The Birth Rate for 1948 was 17.6 per 1,000 of the estimated population as compared with 21.4 for 1947. The Rate for England and Wales for the same period was 17.9.

Death Rate

The Death Rate for 1948 was 10.7 and therefore shows a slight reduction from last year which was 11.2. The comparable figure for England and Wales for the same period was 10.8.

INFANTILE MORTALITY

16 deaths of infants occurred under one year of age giving an Infantile Mortality Rate of 48.6. The corresponding rate for 1947 was 36.6.

The Infantile Mortality Rate although showing a slight increase from that of last year is still very much reduced by comparison with those of 20 years ago, i.e., 1927, Infantile Mortality Rate per 1,000 live births was 119. Among measures which are most likely to secure and maintain a reduction in Infantile Mortality Rates in general are (1) improvement in the general sanitary environment particularly in housing; (2) the provision of cleaner and more suitable food, the pasteurising of milk, and the taking of fuller advantage of existing facilities for the supply of milk and meals to expectant and nursing mothers particularly in necessitous cases; (3) the establishment of a well organised maternity service available for every woman who cannot afford to provide adequate facilities for herself; (4) the extension and development of present arrangements for home visiting and welfare centres, so that these may be made fully available for every mother in the care and management of her own child, and the protection of her child from avoidable disease and infection; (5) the provision of a domiciliary nursing service with a trained nurse to be available for attendance in the home in connection with both major and minor maladies of infancy; (6) increased hospital accommodation for infants who cannot be looked after properly at home, under conditions which will ensure skilled nursing and medical treatment; (7) further intensification of scientific investigation of the study of infant hygiene and diseases of infancy in general, and finally, better education of the public in general of the importance of securing adequate provision for maternal and child welfare. The most fatal infectious diseases among infants still remaining Whooping Cough and Measles on account of the respiratory complications, and it is particularly important, where home conditions are prejudicial that there should be adequate hospital provision for such cases.

INFANTILE MORTALITY PER 1,000 LIVE BIRTHS

1939	...	...	...	...	96.1
1940	...	...	...	...	96.0
1941	...	...	...	...	71.1
1942	...	...	...	...	31.4
1943	...	...	...	...	68.9
1944	...	...	...	...	76.2
1945	...	...	...	...	50.5
1946	...	...	...	...	24.9
1947	...	...	...	...	36.6
1948	...	...	...	...	48.6

DEATHS FROM PUERPERAL PYREXIA AND OTHER PUERPERAL CAUSES

It is very pleasing for the report that during the year no deaths occurred from Puerperal Pyrexia and other Puerperal Causes. The advent of modern drugs, chiefly Penicillin, has contributed largely to this satisfactory state of affairs.

It is also interesting to record that the number of mothers who died in childbirth was the lowest ever recorded. Provisional figures issued by the Registrar General shows a rate of 0.86 per 1,000 total live and still births compared with 1.02 in 1947 and 2.70 in 1938.

COMPARATIVE TABLE OF VITAL STATISTICS DURING THE LAST FIVE YEARS 1944 - 1948

Year	Birth Rate	Death Rate	Infantile Mortality per 1,000 Live Births
1944	20.2	18.2	76.2
1945	18.7	13.1	50.5
1946	22.5	10.4	24.9
1947	21.4	11.2	36.6
1948	17.6	10.7	48.6

CAUSES OF DEATH IN 1948

	<i>Male</i>	<i>Female</i>	<i>Total</i>
All Causes	120	81	201
Tuberculosis of Respiratory System ...	5	2	7
Tuberculosis (Other Forms)	2	—	2
Syphilitic Diseases	1	—	1
Influenza	1	4	5
Cancer (all forms)	19	18	37
Diabetes	1	—	1
Intra-cranial Vascular Lesions	16	19	35
Heart Disease	31	17	48
Other Circulatory Disorders	5	2	7
Bronchitis	9	4	13
Pneumonia	5	1	6
Other Respiratory Disorders	2	—	2
Ulcer of the Stomach or Duodenum .	1	—	1
Other Digestive Disorders	2	—	2
Nephritis	1	2	3
Premature Births	1	2	3
Cong. Malformations and Birth Injuries ...	3	2	5
Suicide	2	—	2
Road Traffic Accidents	2	—	2
Other violent Causes	3	3	6
All Other Causes	8	5	13

HEART DISEASE

Although as in previous years Heart Disease is still the major cause of death it is pleasing to record a reduction in the number of deaths for 1948 as compared with 1947. On the other hand Intracranial vascular lesions have shown a tendency to increase.

There were 48 deaths from Heart Disease in 1948 as compared with 71 for 1947.

Increasing measures, in view of the relationship between Rheumatic Infections and the incidence and mortality from Heart Disease, are being taken by the establishment of special clinics and provision of hospital beds for the treatment of Rheumatism and allied conditions, and there appears to be an extensive field with regard to research in connection with Rheumatism, which as has been stated in previous reports, is a problem of great magnitude. In a pre-war survey in Great Britain, chronic rheumatism was responsible for 1/6th of the total invalidism of the insured population, and in the United States of America 5% of the population was suffering from Rheumatism. Increasing measures therefore in connection with Rheumatic disease in general may materially assist in securing a reduction in mortality in secondary disease of the heart. In the School Medical Service increasing attention is being given to measures for dealing with Rheumatism in childhood.

CANCER

During the year 37 deaths occurred in the area from all forms of Cancer as compared with 22 for the previous year and 25 in 1946.

The value of early diagnosis and prompt treatment is again emphasised especially so in superficial Cancer, i.e., Cancer of the Skin, where Radium can be used with good effect and in the case of Breast Cancer, it cannot be sufficiently stressed that medical advice must be sought at the first signs of abnormality without making the fatal mistake of waiting for the onset of pain, where in such instances, the disease has passed the operative stage. In Cancer of the Skin modern methods of radiation should obtain approximately 100% survivals although the actual figure is between 80 and 90%.

Treated in time most cases of Cancer are curable and in some forms of the disease nearly nine out of every ten patients can be saved. Year after year however, Cancer kills 70,000 people in England and Wales alone, and the question may well be asked, why does so curable a disease rank second in our causes of death? The answer is that although patients treated early are twelve times more likely to recover than those treated later, only one person out of every four seeking treatment comes sufficiently early, and 2/3rds die without

any radical treatment. Early symptoms are neglected and for too long the patient ignores the warning symptoms which should lead him to seek urgent medical advice, and of course with the public dread of the disease the consultation is often put off too long that might confirm his worst fears. Ignorance and fear are greater killers than the disease itself, and while the public waits for some miraculous cure a less dramatic remedy is at hand as envisaged in the five years campaign of Health Education in the United States of America, on the nature, early signs and symptoms, and the curability of Cancer, which has had the most encouraging results, the killing delay in seeking medical advice being reduced by half, and the recovery rate raised by 3%. A similar result in England and Wales would mean an immediate saving of 3,000 lives annually and over the years it is believed that a more informed public attitude would steadily better the figures so that in time the annual Cancer Death Rate might be appreciably reduced without any new advance in medical treatment. A campaign of this type wrongly directed could create a pathological dread of Cancer, but based on an atmosphere of hope could remove or reduce fears of mutilation and death.

The Cancer Death Rate for 1948 for all persons was 1,853 per million the same as in 1947.

Intensified research is still continuing into the causation of Cancer.

NURSING IN THE HOME

The conditions under this heading are much the same. The County Nursing Association provides two nurses for general district work and there is a nurse at Pelton Fell and one at Chester Moor also engaged in these duties.

(a) **Infectious Disease.** As the great majority of infectious disease cases are removed to the Isolation Hospital (which is situate in the Urban District) no special arrangements for this purpose is in operation. This hospital is now included in the area of Durham Hospitals Management Committee, within the general framework of the hospital services of the Newcastle-on-Tyne Regional Hospitals Board.

(b) **Midwives.** There are 5 certified Midwives practising in the area. They are subject to the supervision of the Inspector of Midwives of the Durham County Council,

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1948

	RATE PER 1,000 TOTAL POPULATION.		ANNUAL DEATH RATE PER 1,000 POPULATION.								RATE PER 1,000 LIVE BIRTHS.	
	Live Births	Still-births	All Causes	Typhoid & Paratyphoid Fevers	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Smallpox	Diarrhoea and Enteritis (under Two years)	Total Deaths under One year
England and Wales...	17.9	0.42	10.8	0.00	0.00	0.00	0.02	0.00	0.03	0.00	3.3	34
126 County Boroughs and Great Towns, including London ...	20.0	0.52	11.6	0.00	0.00	0.00	0.03	0.00	0.03	0.00	4.5	39
148 smaller Towns Estimated Resident Populations, 25000 to 50,000 at Census 1931 ...	19.2	0.43	10.7	0.00	0.00	0.00	0.02	0.03	0.04	0.00	2.1	32
London ...	2.1	0.39	11.6	0.00	0.00	0.00	0.01	0.01	0.02	0.00	2.4	31
Chester-le-Street ...	17.1	0.32	10.7	0.00	0.00	0.00	0.01	0.00	0.27	0.00	0.0	48

The Maternal Mortality rates for England and Wales are as follows
Abortion: Mortality per million women aged 15-45, England & Wales.

No. 140 abortion with Sepsis.	No. 141 abortion without Sepsis.	No. 147 Puerperal Infections.	Nos 142-6 148-150 Others.	Total
0.11 9	0.05 4	0.13	0.73	1.091 1.3

Notifications		England and Wales	126 County Boroughs and Great Towns including London	148 smaller Towns Resident Population 25-50,000 1931 Census	London Administrative County
Puerperal Fever	...	6.89	8.90	4.71	7.34 *
Puerperal Pyrexia	...	...	...	...	...

LABORATORY FACILITIES FOR THE EXAMINATION OF PATHOLOGICAL AND BACTERIOLOGICAL SPECIMENS

The following are particulars of examinations undertaken during 1948 at the Central Public Health Laboratory, Government Buildings, Ponteland Road, Newcastle-on-Tyne.

DISEASE			POSITIVE.	NEGATIVE.
Diphtheria	...	...	2	9
Tuberculosis	...	...	1	33

The above figures do not relate to returns taken by the Medical Officer of the Chester-le-Street Isolation Hospital except in so far as they relate to cases normally resident in the Chester-le-Street Urban District.

DIPHTHERIA PROPHYLAXIS

Under the National Health Service Act, 1946, responsibility for providing Diphtheria Immunisation now rests with the local health authority defined under the Act, i.e., in this instance the DURHAM COUNTY COUNCIL. Diphtheria immunisation for the under fives is carried out at the Welfare Centre, West Lane, and for children of school age it is carried out by the General Medical Practitioners in the district by arrangement with the Local Health Authority.

It is interesting to report that the number of cases of proved Diphtheria occurring in the district is the lowest ever recorded, which appears to be adequate proof of the efficacy of the immunisation campaign commenced some years ago by this Department, although now continuing under the auspices of the Local Health Authority. No deaths occurred from Diphtheria during the year, but it is still necessary to emphasise to parents the continued need for seeking medical advice for any suspicious cases of sore throat, so that Anti-toxin can be given without waiting for the results of throat swabs to be taken. As has been stated in previous reports, and is worth reiterating, the real benefits of immunisation will be obtained only by long and continued efforts, which if maintained, will provide the answer to the elimination of Diphtheria as a menace to our children. Apart from local statistics, added proof of the efficacy of immunisation both as regards reduction in incidence and mortality is shown by figures issued by the Ministry of Health, see circular 40/1949, showing the totals of deaths and original notifications during the past nine years since the campaign was commenced.

				DIPHTHERIA	
YEAR				CASES	DEATHS
1940	...	...	...	46,281	2,480
1941	...	...	...	50,797	2,641
1942	...	...	...	41,404	1,827
1943	...	...	...	34,662	1,371
1944	...	...	...	29,949	934
1945	...	...	...	25,246	722
1946	...	...	...	18,283	472
1947	...	...	...	10,465	244
1948	...	...	...	8,034	150

The number of cases notified in Britain was also the lowest ever recorded, being 47,000 below the average of 55,000 which was obtained in the 10 years period 1931/40 which apart from the prevention of a large amount of human suffering also resulted in substantial saving in hospital costs and freed medical and nursing personnel for other work.

The provisional total number of deaths in England and Wales for 1948 was at the record low level of 150 as compared with an average of about 2,800 deaths annually in the 10 years period 1931/40, and for the seventh consecutive year since the campaign was commenced, the number of deaths was the lowest ever recorded.

The principal object for the immunisation campaign remains the same, i.e., to secure at the earliest suitable age the immunisation of at least 75% of all infants reaching the age of one year. There is an insistent need to lessen the gap between aim and achievement, if the risk of rising deaths of Diphtheria is to be overcome as will be seen by the figures in 1948 showing the number of children immunised under 5 years at approximately 575,000 which was 60,000 short of the objective.

As shown clearly too, the decline in the number of deaths following the discovery of Diphtheria Antitoxin and later by the introduction of Diphtheria immunisation it is interesting to report the figures of New York City; the number of deaths of children under 15 years per 100,000 children of that age group for the period 1874-1878—(836), and 1934-38—(4), the bracketed figures indicating the number of deaths.

The best results in any campaign are obtained from a combination of national and local publicity, and by an organised system of personal persuasion by Doctors, Health Visitors, District Nurses, Staffs of Welfare Centres, Voluntary Workers of various organisations. In this connection members of Local Authorities have a very important part to play.

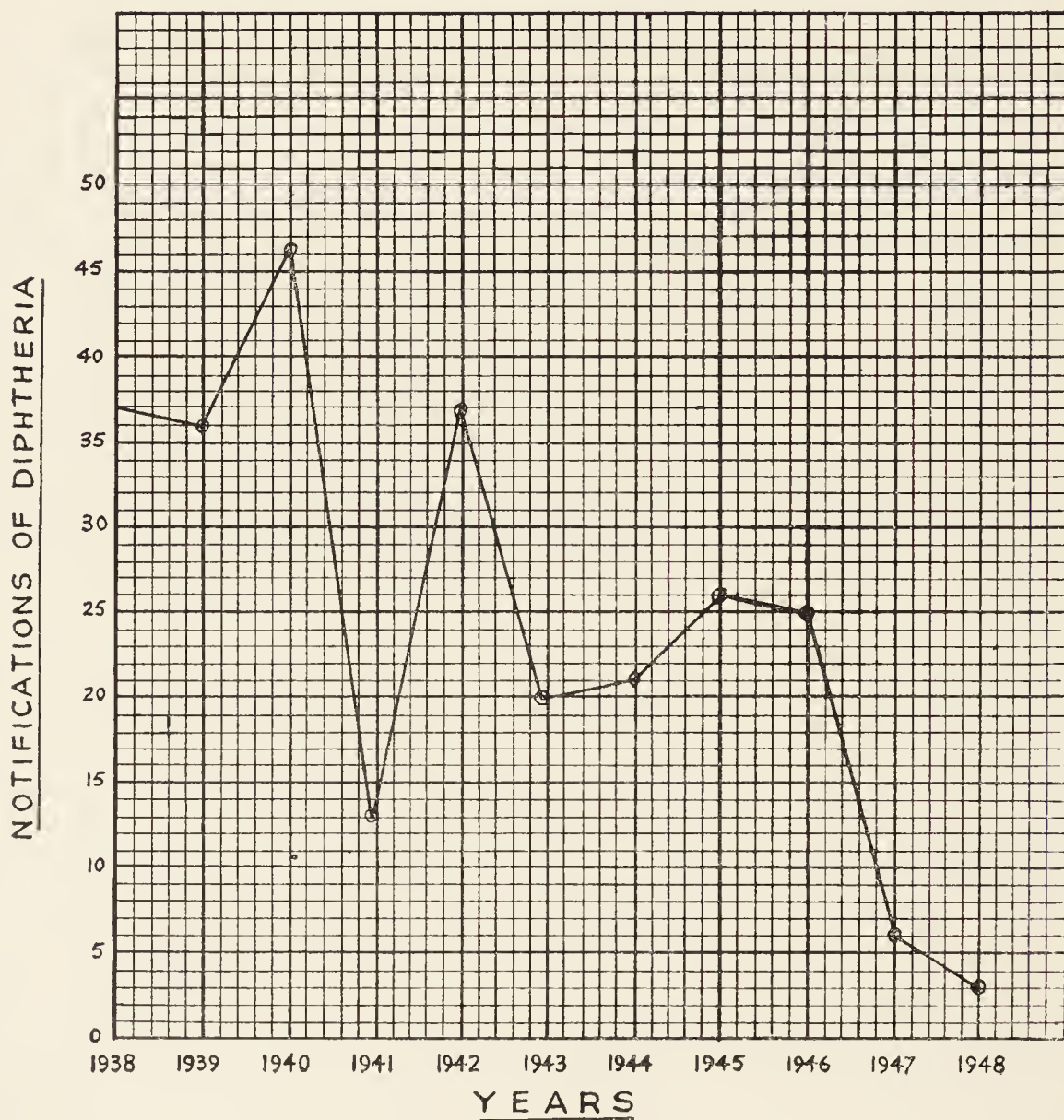
In this district the number of children born between 1934-48, who have received a course of initial immunisation, is 2,340. During 1948, 344 children received initial immunisation and 134 received re-immunisation

**NUMBER OF CHILDREN WHO HAD COMPLETED A FULL
COURSE OF IMMUNISATION AT ANY TIME UP TO 31st
DECEMBER, 1949**

Age as at 31/12/48	Under 1	1	2	3	4	5	6	7
Born in year:	1948	1947	1946	1945	1944	1943	1942	1941
Number immunised	17	210	224	185	257	176	103	144
Age as at 31/12/48	8	9	10	11	12	13	14	Total
Born in year:	1940	1939	1938	1937	1936	1935	1934	
Number immunised	135	154	148	245	135	102	105	2340

It is pleasing to record that during the year under review only 3 cases of proved Diphtheria occurred in the district.

As illustrating the marked reduction in incidence of Diphtheria notifications locally since the introduction of Diphtheria Immunisation, I append below for the information of members a graph covering the years 1938-48 inclusive :-



In the six years period, 1943-48, it is noteworthy to record that only 2 deaths occurred from Diphtheria compared with 7 deaths in the previous 5 years, so that although the figures are small the inference that can be drawn is obvious.

SCABIES

It is to be noted that in accordance with the Ministry of Health Circular 110/47 dated 29th December, 1947, the Scabies Clinic has now been closed since it is felt that the condition can be favourably dealt with under the Statutory Powers contained in the Public Health Acts. The department however issues Tetmosol Soap to cases certified as suffering from Scabies by General Practitioners and this has proved of some value in maintaining the reduction in incidence of this condition.

LEGISLATION IN FORCE

The following adoptive Acts and Bye-Laws are in force in the district:—

The Public Health Act 1936, came into operation July 31st of that year and consolidates to a considerable extent much of the previous Public Health Legislation.

Bye-Laws as to the Cleansing, Nuisances, Common Lodging Houses, Tents, Vans and Sheds, Slaughter Houses, Offensive Trades, Public Bathing and New Streets and Buildings, were sanctioned by the Ministry of Health, 12th February, 1923. Public Health Act 1925, Parts II, III, IV, and V adopted 15th March, 1926.

The Public Health (Smoke Abatement) Act 1933; the Slaughter of Animals Act, 1933 and the Housing Act, 1935 and 1936, also the Housing (Prevention and Abatement of Overcrowding) Act, 1935.

The Factory and Workshops Act, 1937 and the Food and Drugs Act 1938 which came into operation on 1st October, 1949.

The Puerperal Pyrexia Regulations, 1939, came into operation 1st April, 1939, and the Measles and Whooping Cough Regulations 1939, came into operation on October 23rd, 1939. Public Health (Tuberculosis) Regulations 1940. Public Health (Tuberculosis) Regulations 1946, dated November 21st, 1946, made by the Minister of Health under the Public Health Act, 1936.

Ice-cream (Heat Treatment, etc.) Regulations 1947, made by the Minister of Health under the Food and Drugs Act, 1938. Ice-cream (Heat Treatment, etc.) Amendment Regulations 1948, made 20th April, 1948, came into operation 30th April, 1949.

National Health Service Act, came into operation 5th July, 1948, and the National Assistance Act, made 8th June, 1948, came into operation 10th June, 1948.

GENERAL PROVISIONS OF HEALTH SERVICES IN THE AREA

With the changes ensuing on the establishment of the Hospital and other Specialist Services under the National Health Service Act, 1946, certain changes have occurred in the provision of the health services in the district as follows:—

(a) **Fever.** The district was previously served for the purpose of Isolation Hospital accommodation under the auspices of the Chester-le-Street Joint Hospital Board, but now pursuant to the changes under the National Health Act, the hospital will continue to admit such cases from the area of the Durham Hospitals Management Committee.

(b) **Smallpox.** Provision for Smallpox cases is now made at the Brandon Isolation Hospital as the Shincliffe Smallpox Hospital has closed. It is pleasing to record that there have been no cases of Smallpox in your area for a number of years.

(c) **Tuberculosis.** Together with the Hospital and other Specialist Services dealing with Tuberculosis, this clinic is now under the control of the Newcastle-on-Tyne Regional Hospitals Board, and continues to render specialist services in the area served by the Durham Hospitals Management Committee. The National Health Act now envisages a wider conception of Chest conditions which are to be dealt with by such clinics as it is envisaged that the Tuberculosis Officer will in the future be regarded as competent to give an opinion on a wide range of Chest diseases. It is a matter of some urgency that this clinic, which serves a large population, should be brought up-to-date as regards modern diagnostic facilities with an up-to-date X-Ray and Screening Unit. Although in the future it will be designated as a Chest Clinic, it is only true to state that a wide field of diagnosis of all forms of chest disease is already being undertaken. In this connection useful collaboration continues with the Shotley Bridge Thoracic Surgical Unit.

(d) **Typhoid.** During the year the Chester-le-Street Urban District was again fortunate in escaping any large amount of sickness traceable to infected foodstuffs. The need is again strongly emphasised for scrupulous attention to cleanliness in the handling of foodstuffs for human consumption and in this connection too it is important that as much food as possible should be sold adequately wrapped to prevent exposure to flies and dust, etc. In households, particular care should be taken in the summer months with regard to the covering of foodstuffs in common use, particularly milk, to prevent infection by flies who can be potent carriers of infection.

(e) **Children.** Accommodation for sick children is provided by the Hospital for Sick Children, Newcastle-on-Tyne, and the Children's Hospital, Gateshead, under the auspices of the Newcastle-on-Tyne Regional Hospitals Board.

(f) **Orthopaedic.** Although there is no special provision in the Urban District for this purpose, facilities are provided by the hospitals above-mentioned and also the Royal Victoria Infirmary, Newcastle-on-Tyne, all now under the hospital and specialist services in the area of the Newcastle-on-Tyne Regional Hospitals Board.

(g) **Throat, Nose and Ear.** Treatment continues at the Newcastle Royal Victoria Infirmary for diseases of the Throat, Nose and Ear and also at Rye Hill Hospital in the same City under the same Board as above.

(h) **Eye.** There is a special department at the Royal Victoria Infirmary, Newcastle, for diseases of the Eye.

(i) **Maternity.** Maternity cases from this area are admitted to Bishop Auckland, Croxdale Hall, Hardwicke Hall and also the Richard Murray Hospital, Blackhill. Some cases are admitted to the Queen Elizabeth Hospital, Sheriff Hill, Bensham General Hospital and Sunderland Municipal Hospital. It should be noted that all Maternity Hospitals are under the jurisdiction of the Newcastle-on-Tyne Regional Hospitals Board.

(j) **Maternal Mortality.** The following facilities are now afforded by the Regional Hospital Board, Newcastle-on-Tyne, to Medical Practitioners in cases of Puerperal Pyrexia and Puerperal Sepsis:—

- (1) To have a second opinion on the cases;
- (2) To have a bacteriological examination of the (a) lochia, (b) blood;
- (3) That the patient be admitted to hospital;
- (4) That a trained nurse be provided.

The Puerperal Pyrexia Regulations 1939 came into operation on 1st April, 1939.

Health Visitor's Reports. During the year under review 28 reports were received by the Health Department from the County Health Visitor. These related chiefly to Tuberculosis but in some instances reference was made to sanitary defects, overcrowding, changes of address and disinfection of infected premises, and have proved helpful to the department.

WARTIME NURSERIES

The two wartime nurseries in Chester-le-Street which have developed into nursery schools continue to function under the jurisdiction of the Durham County Council. These are situate in pleasant surroundings and much useful work in connection with the development and welfare of the pre-school child is being carried out in them.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN

Unmarried mothers are admitted to County Maternity Homes on the recommendation of doctors at the County Council Maternity and Child Welfare clinics.

The Durham Diocesan Moral Welfare Association maintain Homes for unmarried mothers and babies as under:—

1. Maternity Home—St. Monica's Home, Bondgate, Bishop Auckland.
2. Mother and Baby Hostel—Ramside, Belmont, Nr. Durham.
3. Shelter—St. Faith's Home, 8, Grasmere Street, Gateshead.
4. Shelter—for younger girls—Sydney House, The Peth, Durham.

Homeless children can be admitted to Residential nurseries or Cottage Homes administered by the County Council of Durham.

AMBULANCE FACILITIES

Changes have occurred in the Ambulance Service under the National Health Service Act, 1946, and since July 5th, 1948, this has been under the control of the Durham County Council. The County area has been split up into districts which are served by several ambulance control points, the central control of the organisation being Dryburn Hospital, Durham.

CLINICS AND TREATMENT CENTRES Provided by the Local Health Authority

Maternity and Child Welfare Centre.	Welfare Centre, West Lane, Chester-le-Street.	Monday and Friday afternoon 1.30 p.m.—4.0 p.m. Sunlight; Tuesdays 9.0 a.m.—4.0 p.m. Ante-natal; 2nd and 4th Wednesdays every month, Babies; 1st and 3rd Wednesdays every month, immunisation. Thursday 9.0 a.m.—12 noon, new ante-natal. 1.30 p.m.— 4.0 p.m. post natal.
School Dental, Eye, and general Clinic.	Hexham Villa, Birtley.	By appointment.

It is noted that clinics for the treatment of Tuberculosis and Venereal Diseases is now provided by the Newcastle-on-Tyne Regional Hospitals Board, particulars of which are appended below:—

Tuberculosis	Ropery Lane, Chester-le-Street.	Monday 9.30 a.m. for Men Thursday 9.30 a.m. for Women and Children
Venereal Diseases.	Newcastle General Hospital, Westgate Road, Newcastle-on-Tyne.	Two Clinics, one male and one female:— Monday to Friday— 10 a.m.—12 noon. 3.0 p.m.—7.0 p.m. Saturday— 11.0 a.m.—12 noon. 4.30 p.m. 6.30 p.m.

VENEREAL DISEASES

The prevalent opinion in this country is that the best results with regard to these diseases are likely to be obtained by the encouragement, especially of young adults, to lead clean and healthy lives, and in the provision of a sufficient number of centres for expert diagnosis and early treatment.

Opinion in this country still appears to be against compulsory treatment, the conclusion being reached that the degree of success attained in the reduction in incidence of Venereal Diseases is broadly similar in this Country to those in which compulsory treatment has been adopted.

The use of Penicillin is now being widely adopted in clinics and treatment centres which exist for expert diagnosis and treatment of these diseases. A certain amount of local propaganda has been carried out during the year and the department has been able to be of service in the reference of a limited number of cases to the appropriate clinics for treatment and advice.

NUTRITION

Up to 25 years ago food was usually thought of in calories and there was little understanding of the multitude of complex chemical and bio-chemical actions which together determine the healthy body. Our knowledge today has vastly widened almost beyond the grasp of the individual scientist. We know now what foods are good for us and why, and could range before us a dozen or two different chemical compounds each of which could seemingly, by its general absence from our food, mar the general progress of mankind. Once again the appreciation of a simple truth is gained with much learning, that a good mixed diet intelligently selected, will give us all we

require in calories and supply us with all the accessory foods. This new knowledge however has done more than that, having shown us what foods to grow, the steps we must take to improve their quality, how to prepare and store them and how to distribute the food according to biological needs with the addition of valuable ingredients in special circumstances.

In connection with the increasing attention which is now being paid to campaigns for the provision of clean food it is well to reiterate a few of the basic principles relating to food infections. It should be realised that many of these bacteria are of the staphylococcal type and are carried in the nose and throat of food handlers or are conveyed to the food by sores on the hands, etc., whilst other groups of bacteria, of animal origin are conveyed to the food by mice, rats and pigs, etc. It is therefore an obvious fact that the more food handled the greater is the risk of infection and of course outbreaks are more numerous in summer than in winter, since the summer temperatures encourage rapid multiplication of bacteria. Since, in the great majority of cases, infection of food takes place while it is being prepared for retail sale, it is therefore plainly desirable to concentrate our attention on the processing of food and its preparation in communal feeding establishments. Although communal and restaurant feeding carries some obvious advantages it also carries with it certain disadvantages which it is the clear duty of society to mitigate. Restaurants and canteens may have insufficient washing up facilities and too little crockery so that utensils have to be used several times during meal periods and not enough care and attention may be given to their washing and drying. Apart from difficulties at the present time it is considered necessary that a standard should be set up for all catering establishments, i.e., a minimum number of washing tanks and regulations with regard to the temperature of water and the use of drying cloths, etc. Routine examination of staff may not be possible at present but it should be laid down that all cases of illness in such establishments should be notified to the Medical Officer of Health for the area. In this way faulty handling of food and infection of food as a result of ignorance of basic principles, could be dispelled and an effort should be made to make popular amongst the public the idea of an accepted code of hygiene and kitchen practice. In this way elementary precautions should always be taken by persons handling food; washing of hands after visiting a W.C. should become a second nature, it should be carried out at home and made compulsory at school. Coughing and sneezing, except into a handkerchief should be rigidly guarded against and persons suffering from respiratory infections should preferably be kept away from any processing of food.

SANITARY CIRCUMSTANCES OF THE AREA

Water Supply

It would appear that the immediate future of the local water supply is a matter for some concern. Recent meteorological reports indicate that the rainfall over a period of many months has been below average. In view of this fact, it would seem almost futile to write at length on civil engineering materials when the real remedy is entirely outside the control of mere man. It has been stated that the reservoirs are now at the "halfway" line, and that the water is being pumped for domestic consumption at the rate of 1,000,000 gallons a day from Fishburn and other collieries to supplement the County supplies.

Meanwhile local shortages continue, particularly at Pelton Fell. The chief reservoirs are at Burnhope and Waskerly near Stanhope. The new 12in. main from Stanley to the storage tank at South Pelaw has now been laid to the bridge at Pelton, and an intermediate length has been laid at High Flatts. During 1948 the Durham County Water Board was reported to have decided to investigate the possibilities of obtaining water supplies from the River Derwent. Satisfactory progress was recorded on the construction of the Burnhope pipe-line. "Altogether 32 of a total of 48 miles have been completed, ten miles having been laid during 1948."

Of 6 samples of domestic water supplies submitted for bacteriological examination, 4 were found to be satisfactory and 2 unsatisfactory. Adjustment of the tap and water fittings at the Squatters huts subsequently produced the desired results.

Most recent innovation regarding domestic water fittings are plastic water pipes. It has been predicted that with these plastic pipes housewives would never more be troubled during the frost by burst pipes.

The writer considers that houses should now be so planned and constructed to have water pipes concealed in accessible wall chases, and not left exposed in ugly lines in living rooms and kitchens where housewives spend most of their time.

Sanitary engineering science is rapidly advancing, but as already mentioned, it all depends primarily on the actual rainfall.

Rivers and Streams

Reference must again be made to the undesirable quantities of sewage effluent gravitating into local streams from points considerably removed from Chester-le-Street. In view of the much diminished rainfall referred to earlier in this report, the local streams tend to become sluggish and quite unable to adequately dilute and

carry this additional offensive matter. In the report of the County Medical Officer of Health for the quarter ending December 31st, 1948, it is stated "Grange Villa Sewage Works are obsolete and are to be abandoned. The sewage will be conveyed to Chester-le-Street sewage disposal works. Walldridge Sewage Disposal Works although of modern design, do not function properly owing to subsidence and cause pollution of the Cong Burn. Sewage from these works will also be conveyed to the Chester-le-Street Sewage Disposal Works."

In the meantime the local pollution from the above-mentioned sources is becoming worse. It is reasonable to assume that considerable relief from these circumstances would result if chlorinating plants were installed at the obsolete disposal works mentioned.

It cannot be stated that there is extensive industrial pollution although some is inevitable. During 1948, over 300 inspections were made of the streams in the Urban area and contamination in varying degrees were observed as follows:—

Chester Moor Burn ...	...	20 days
Chester-le-Street Burn ...	...	150 days
Chester Moor West Beck ...	...	12 days
Newfield Dene ...	...	15 days

The geographical situation of Chester-le-Street in a natural basin is such as to dispose local streams to pollution by gravitation from higher sources. Therefore any stigma regarding the pollution mentioned should be resisted, as the conditions discussed may have their origin in remote districts.

DRAINAGE AND SEWAGE

Chester-le-Street Sewage Disposal Works

Since its installation in the year 1933, this Sewage Disposal Works has given continual and sterling service but, as may be expected, there has been some wear and tear of the pumping and other machinery. The Surveyor reported the necessity for certain replacements including a pumping shaft impeller and distributing arms. This Officer also reported that the six acres of land hitherto cultivated at the Sewage Works was now so poor that it would be uneconomical to sow crops in this ground, and it was agreed to cultivate a further six acres of sludge land on the East side of the river. An interesting feature brought to the notice of the Council was the reference to the fact that classes of Student nurses from Hospitals in the larger towns were from time to time conducted by the Sewage Works Foreman over this efficient plant for instructional purposes, and is a tribute to all concerned.

Pelton Fell and Newfield

Practically the whole of the population of Pelton Fell has now been transferred to the new Housing Estate at Whitehill which includes a modern drainage system.

The 22in. sewer from this part of the area has an outfall into the Chester-le-Street Disposal Works and operates by natural gravitation. It continues to give satisfactory service. This sewer was laid in 1922 as a scheme to assist the unemployed at that period and follows the bed of the Burn for some distance. Attention is constantly directed to the possibility of damage from colliery and brickworks waste matters.

Chester Moor Sewage Works

The proposed new sewer from Chester Moor village will have an outfall at the Chester-le-Street Sewage Disposal Works. The scheme is now in the hands of the Council's Consulting Engineers who have recently reported progress.

When this sewer has been laid and is in operation, the obsolete plant at Chester Moor will be dismantled and abandoned. In the meantime, apart from other public health dangers, the crude sewage from this village is still being discharged into the Dene burn and presents considerable risk to the cows and other animals feeding in the adjacent meadows.

Hermitage Rehabilitation Centre

It was earnestly hoped that the scheme for linking up the sewer from the abovementioned Centre would have now been far advanced, and it is therefore somewhat disappointing to report that the work has not yet commenced. As will be understood, it is very undesirable that this modern healing Centre should still depend on obsolete drainage and sewage methods. The only reasonable explanation will be found in the desirability of connecting with the proposed new sewer from Chester Moor when the same has been laid and is available.

Sewer, Jubilee Yard.

This sewer connects to the main network in the Front Street and on excavation and inspection was found to have a broken junction. The broken pipe was renewed and enveloped in concrete. As it was necessary to excavate to a depth of 10ft. to 15ft. in soft sandy soil and without unduly slowing down the very considerable traffic in the Front Street. Tribute is extended to the Surveyor for this no small engineering feat.

Sewer, Ropery Lane

The 12in. overflow sewer from Broadwood View was found to be obstructed with roots of trees from the Cemetery. The pipes were cleared and surrounded with concrete to prevent a recurrence of this defect and obstruction.

Ash-Pits and Privies

Notwithstanding the recent inducement offered by this Council to contribute £5 towards the cost, many property owners have failed to convert large numbers of ash closets into the more hygienic water closets, but it must not be overlooked that the Public Health Act 1936 still accepts the provision of an ashcloset, water closet, or privy as sufficient to meet legal requirements. In isolated cottages and villages without an adequate sewer and sewage disposal facilities, it would, of course, be impossible to provide other than earth closets or privies. Thus it is only when there is a structural or other indisputably defined nuisance that an ashcloset may be altered into the water carriage system. The alternative, is to pay half the cost of conversions.

It is estimated that there are 4,837 water closets, 677 ashclosets, and 17 privies in the Urban area. During 1948, there were 30 ashclosets converted into water closets. This number shows an increase in such conversions of 23 over the figure of 7 in 1947. With an increase in the supply of essential materials, together with the financial assistance abovementioned, there should now be a steady increase in the number of ashclosets converted in the area.

Bloomfield Terrace, Pelton Fell

The food stores (pantries) are very near ashclosets at the above property, consequently the owners have been approached to convert the 20 ashclosets at these houses into the water carriage system. Conversations and consultations ensued, and on examination the sewer was found to be adequate. In recent weeks a plan for these conversions was submitted by the Sanitary Inspector and was passed by the Council. It is hoped that this work will commence in the near future. It must, of course, be remembered that it is only within recent years that an adequate outfall has been available for Pelton Fell sewage.

Lofty sentiments, excuses and explanations may be readily available, but it is regrettable that there are still many ashclosets remaining in this progressive town.

Materials for Sanitary Fittings

A revolution is now taking place in the materials used for domestic fittings. Mr. A. F. Nall, A.M.I.S.E., A.M.Ins.W., writes with interest on the many changes which have taken place since the first Public Health Act was passed a century ago. Writing on the evolution of design, he states inter alia:

“Attributes of the Materials

It has been stated that materials for the manufacture of sanitary appliances should be “durable, impervious, non-corrodible and have a smooth surface, which is easily cleaned.” An examination

of the principal materials used for the manufacture of appliances may assist in revealing the extent to which they meet these principles.

The ceramic group, which includes cane-ware, earthenware, fireclay, stoneware, and vitreous china, has been the chief source of the materials used for lavatory basins, sinks, W.C. pans, urinals, drinking fountains and for lavatory troughs, bowls and fountains. Vitreous-enamelled cast iron has provided an alternative for part of this range, notably in the cases of lavatory basins and bowls, drinking fountains and lavatory fountains; in the case of baths, this material has displaced the ceramics and for a long time has enjoyed a place to itself, although it has latterly been challenged by the vitreous-enamelled, pressed-steel bath. Enamelled steel has also entered the market for lavatory basins and sinks, where it has been accompanied by a number of self-finish metals, viz., stainless steel, Monel metal and aluminium alloys. The newest entrant is plastics, which is now being used for sinks and lavatory basins.

The finish of all these materials may be said to comply generally with the basic principles, the only doubts that could be entertained being in connection with durability and non-corrodibility. When the questions "What is durable?" and "What is non-corrodible?" are posed, it is seen that there is only a relative certainty regarding the position.

It is clearly incorrect to assume that a lavatory basin or bath must remain in good condition for ever, its surface is unimpaired by repeated use and cleansing. On the other hand, it is surely incorrect to assume that if the surface is ruined in a period of months by cleansing with scrubbing-brush and an abrasive of more-or-less caustic properties, the fault is entirely that of the person doing the cleansing.

The terms "durable" and "non-corrodible" must obviously be defined in relation to the service conditions. The assessment of those conditions should take into account the treatment that may be encountered rather than that which, perhaps, it is convenient to regard as likely. No doubt it can be claimed, and with justification, that these factors have already received consideration. But what has been its basis? That of experience, or of what could be supplied "for the money," or something more factual? Unfortunately, no independent enquiry has yet produced any data upon which the minimum physical requirement could be based and, in the absence of a common standard, the performances of the different materials cannot be accurately compared.

It should be remembered that vitreous china is the only material which is vitrified throughout; if the surface glaze is removed it alone remains impermeable. This is obviously a valuable characteristic on grounds of continued hygienic service. The

greatest risk to health would probably arise in the case of a W.C. pan, but it is difficult to visualise service conditions that even the most pessimistic would regard as "reasonable," resulting in the removal of the glaze.

So far, the larger appliances, such as urinals, lavatory troughs and sinks, have been made only in fireclay due to the difficulty of controlling warping in the other materials. Efforts are continually being made to overcome this difficulty, particularly in the case of vitreous china. If it should become possible to offer the complete range of appliances in vitreous china there would appear to be a bright future for this development.

Turning to the alternative materials, the absence of a criterion becomes most keenly felt. All metals can claim superiority over the ceramics in regard to fracture, either from impact or thermal causes, but plastics have still to be assessed from this point of view. On the question of the durability of their exposed surfaces, the self-finish metals probably have the strongest claim to the highest standard of performance, particularly if they are highly polished during manufacture. But their applications are limited by their appearance, which in turn is judged by what is customary and by what will most readily blend with the surroundings into which the particular fitting is to be placed.

Plastics are being used in the manufacture of lavatory basins and of sinks and draining boards. These are comparatively new applications and it is early to assess their status. There is no doubt of the attractiveness of some of the colours and designs that have appeared, but there are matters on which some reassurance is desirable. For example, some plastics are more susceptible to thermal changes than others and thermal stability is essential. In addition, there is an appreciable variation in regard to resistance to abrasion. Whilst certain plastics have an almost indestructible surface, others mark fairly readily or may lose their gloss under abrasive influences. Yet again, there are both resilient and brittle materials in the range of plastics. Whether the particular material that, from the stand-points of production and of cost, makes the best appliance also combines all the other features in the best way is a matter that has yet to be definitely ascertained."

Given durability and reliability, the increasing use of plastics should prove an economic and artistic blessing. With the scarcity and the absurd costs of lead, copper and tin, etc., local authorities are liable to be delayed in their housing schemes. Plastics should be produced cheaply, plentifully and in a variety of beautiful designs and colours. It is possible to visualise a fastidious housewife insisting on a plastic lavatory pan in a delicate peach shade. Revolutionary changes indeed.

Eradication of Bed Bugs

One writer has recently described bed bugs as the “ Menace which moves by night,” and it would be difficult to find a more fitting description. These pests stalk by night for their food supply which is human blood. The results may only be imperfectly pictured when it is mentioned that many unhappy children are the victims of these blood sucking marauders, whilst the rest of the community are completely ignorant of the domestic tragedy enacted during the hours of darkness. Some people are either negligent, indifferent or too sensitive to report bug infestation. Consequently conditions become chronic and neighbouring premises are liable to become infected before being discovered by those in authority.

As required by the “MINISTRY OF HEALTH, the following are the tabulated particulars of the action taken for the eradication of bed bugs in 1948:—

- (1) Number of Council houses found to be infested, 8, disinfested, 8. Other houses found to be infested, 14, disinfested 16.
- (2) Methods employed for freeing infested houses from bed bugs and the name of the fumigant and/or insecticide used—General cleansing and the use of Gammaxane smoke generators.
- (3) The methods employed for ensuring that the belongings of tenants are free from vermin before removal.—Spraying with one of the above-named preparations.
- (4) Whether the work is carried out by the Local Authority or by a contractor—By Local Authority.
- (5) The measures taken by way of supervision or education of tenants to prevent infestation or reinfestation after cleansing—Home visits and advice.
- (6) Stripping of picture rails, skirting boards and door architraves, etc., and treating all resultant sites and chases with the blow-lamp and chemicals mentioned above.

The discovery of many “ persistent ” insecticides has brought complications in its train, and several of the following factors call for some reference. The much extolled D.D.T., whilst an effective killer may be described as having somewhat delayed action and is therefore a “ long term ” insecticide; consequently some favour the new “ Gammavane ” chemical which has proved effective and dramatic in its application. It must be remembered, however, that the entomology of the various insect pests which harrass man in his domicile and environment vary considerably, so that it is quite impossible to lay down a simple procedure on the lines of what “ is good for the goose is sauce for the gander.” To use slightly more

technical references one may quote " The use of biological technique inevitably requires special handling of the findings (results) owing to the many variables involved," states Mr. D. L. Davies of the Imperial Chemical Industries Ltd.

Particularly is this so with regard to the difference of susceptibility of individual organisms. Relative to the above quotation the chief points to be considered are:—

- (1) The insect and its habits.
- (2) The physical form of insecticidal deposit.
- (3) The nature of the surface on which applied.
- (4) The contact time.
- (5) The age of the deposit.
- (6) Temperature.

Although several of these factors may operate simultaneously in any given example, sufficient will already have been seen to give at least an insight into the problem involved. Finally, it must be remembered that the damage caused by bugs, cockroaches, weevils and other pests are not all confined to man's habitat. There is the grain insect (costing the Americans millions to combat) which is capable of destroying many tons of valuable food. During the present world food shortage (or at any other time) such losses cannot be tolerated. From bugs to weevils may be a far cry, but it will be seen that there is a tremendous field covered by " pestology " and the subject has a close relation to the physical health of mankind, his means of subsistence and with the amenities of his environment.

Schools

In the Annual Report for 1947, it was erroneously stated that milk is provided to school children for a small fee. Milk of course, is provided free for all children. The feeding centres at Bullion Lane school and that at the Roman Catholic school have been completed and are now in use. Herewith is a list of the schools in the Chester-le-Street Urban District.

- (1) Council Senior, Junior and Mixed, Church Chare.
- (2) Church School, Church Chare.
- (3) Victoria C.E. School, Co-operative Street.
- (4) Burns School (not at present in use as a school).
- (5) Red Rose School at the South end of the Town.
- (6) R.C. School, Ropery Lane.
- (7) Modern School, Bullion Lane.
- (8) Grammar School in Deanery Grounds.

Some of the above-mentioned schools are modern buildings. There is scope for the provision of a new school at South Pelaw where the Council estate is rapidly expanding. Mention is also made of the Nursery schools at Clarence Terrace and The Green,

Council Estate. Expert opinion has recently been expressed regarding the improving physique of the children of school age in this Country, and this progress must in a large measure be attributed to the introduction of school feeding which has proved a great blessing to many working class families. It is obvious that weedy ill-fed children could not adapt themselves to the intensified modern standards of learning. Records still exist of the hardships endured in the alleged good old days. A glimpse of these so-called good days has been revealed in the book "The man with the cap." The life of Herbert Smith by the Right Hon. J. J. Lawson, M.P. "Children (he writes) sold newspapers among the slush and snow, in clothes so ragged that they looked like hen's feathers flapping in the wind. The poor-law was almost non-existent, except for those who lived in sombre workhouses. To ask for out-relief was to be asked to be put in the dock like a criminal and to receive an amount of help which would hardly pay a bus fare to-day."

These are facts, therefore there can be nothing but praise for those who, with high ideals and endeavour have raised the standard of living and are producing alert and healthy children.

SUMMARY OF WORK DONE IN THE SANITARY INSPECTOR'S DEPARTMENT DURING THE YEAR 1948

			Number of Informal written Notices by Inspector.	Number of Formal Notices by order of Authority.	Number of Nuisances abated after Notice.
1.—PUBLIC HEALTH ACTS.					
Dwelling Houses and Schools					
Foul Conditions	...	...	—	2	2
Structural Defects	...	...	68	12	60
Overcrowding	...	...	—	—	—
Lodging-houses	...	...	—	—	—
Dairies and Milkshops	...	...	2	—	2
Cowsheds	...	...	5	—	5
Bakehouses	...	...	5	—	5
Slaughter-houses	...	...	—	—	—
Ashpits and Privies	...	...	30	—	30
Deposits of Refuse and Manure			4	—	—
Waterclosets	...	...	46	—	46
Defective Yard Paving	...	...	8	—	8
House Drainage—					
Defective Traps	...	...	2	—	2
No Disconnection from Sewers			—	—	—
Other Faults	...	...	20	—	20
Water Supply	...	...	10	—	10
Pigsties	...	...	—	—	—
Animals Improperly Kept	...	...	—	—	—
Offensive Trades	...	...	...	...	—
Smoke Nuisances	...	...	—	—	—
Other Nuisances	...	...	—	—	—
TOTALS	...	...	200	14	194

2.—WATER, FOOD AND DRUGS.

Samples of Water taken for Analysis	...	...	...	8*
Samples condemned as unfit for use	...	...	...	—
Surrenders of Unwholesome Food	...	...	...	1,116†
Convictions for exposing or selling Unwholesome Food				—
Samples of Food and Drugs taken for Analysis			...	19‡

3.—PRECAUTIONS AGAINST INFECTIOUS DISEASE.

Lots of Infectious Bedding stoved or destroyed	...	...	2
Houses disinfected after Infectious Disease	...	...	64
Schools disinfected after Infectious Disease	...	...	3
Prosecutions for exposures of infected persons or things			—
Convictions for exposures of infected persons or things			—

4.—GENERAL

Number of New Houses erected during year ...	...	159§
Number of such Houses occupied during year ...	...	159
Ashpit-privies converted into Ash-closets ...	...	—
Ashpit-privies converted into Water-closets ...	...	30
Ash-closets converted into Water-closets ...	...	—
Total number of Water-closets in District ...	...	4,837
Total number of Ash-closets in District ...	...	677
Total number of Ash-pit privies in District ...	...	17

*Including 4 samples from the Squatters' huts.

†Including meat (unsound and diseased) surrendered at the local Ministry of Food Slaughter house.

‡Advisory. Samples of milk taken for bacteriological examination regarding cleanliness.

§30 Private houses. 36 Aged persons houses. 29 Three-bedroom type houses. 64 Prefabricated houses.

Scavenging and Refuse Disposal

Where there is no Refuse Destructor, controlled tipping is a reliable and safe substitute. Mr. John Ames, M.I.P.C., writes "Controlled tipping has been in vogue for a number of years, yet we find to-day many good sites being used with little or no control. In many cases these are blots on the land, instead of being used to improve it." Without any desire to be presumptive or facetious, it is astonishing how few realise the importance and necessity for controlled tipping. Some appear to think that the "Control" is confined to limited tipping over given areas. Controlled tipping is, of course, a scientific and practical process designed to render the tipping of house refuse on open land innocuous, free from pests, and fire. Reduced to simple proportions it consists of sandwiching inter-layers of virgin soil with varying depths of house refuse. The result is not only desirable from a public health aspect, but in some parts of the country such land has been made into excellent playing fields and gardens.

Mr. C. E. Boast, M.I.C.E., F.R.I.C.S., M.I.Mun.E., Borough Engineer of Croydon, gives the following example of what may be accomplished by controlled tipping. He writes. "The site, which has an area of 15 acres, is a low-lying common in the neighbourhood which becomes water-logged in winter, and is unsatisfactory in many other respects. About 1,000 tons of refuse are being tipped every week and the land is being converted into well-laid playing fields and park-land. The refuse being consolidated is sprayed with Gammaxine insecticide powder." There is no doubt but that, where there is no Refuse Destructor available, controlled tipping stands out in solving the problem of hygienic refuse disposal.

Local Refuse Disposal

The refuse collection is carried out locally by one Bedford and three Fordson motor lorries. In addition there are two horse drawn carts which supplement the motor vehicles and are useful where mechanical vehicles cannot obtain ready access. There are still about 800 ashpits in the area from which all refuse requires man-handling into the vehicles. This process is not in the best interests of public health, but improvement is indicated by the removal of these ashpits and the provision of refuse bins. Recent High Courts ruling shows that the responsibility for the renewal of defective refuse bins rests with the owners of the property. Refuse is deposited on open ground. There are tips on the north approach road, the south end of the town, Chester Moor Dene and Newfield Dene. The refuse tip adjacent to the sewage works is not now in use, but some refuse is being deposited at the " Buckles " near the north boundary of the sewage disposal works.

HOUSING

1. Inspection of Dwelling-houses during the year:	1948
(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	215
(b) Number of inspections made for the purpose ...	380
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925	142
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	Nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	14
2. Remedy of Defects during the Year without Service of Formal Notices:—	
Number of defective dwelling-houses rendered fit in consequence of formal action by the Local Authority or their Officers	14

3. Action under Statutory Powers during the Year:

A.—Proceedings under sections 9, 10 and 16 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	14
(2) Number of dwelling-houses which were rendered fit after serving of formal notices—	
(a) By owners	14
(b) By local authority in default of owners ...	Nil

B.—Proceedings under PUBLIC HEALTH ACTS:—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	68
(2) Number of dwelling-houses in which defects were remedied after serving of formal notices	60
(b) By local authority in default of owners ...	Nil

C.—Proceedings under section 11 and 13 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which Demolition Orders were made	Nil
(2) Number of dwelling-houses demolished in respect of pursuance of Demolition Orders	Nil

D.—Proceedings under section 2 of the Housing Act, 1936:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	Nil
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil

OVERCROWDING

It must be again noted that the figures given in connection with OVERCROWDING must be regarded as APPROXIMATE. The local population is far from static and many circumstances make the provision of reliable statistics difficult, if not impossible, at this stage. Overcrowding is an unfortunate aspect of the housing situation and is calculated to have a detrimental effect on the health of those occupying such premises. Men working on different shifts do not obtain adequate rest, and housewives who have to tend to young children and cook in a common livingroom with other families, tend to become nervy and irritable. The situation, however, calls for co-operation rather than criticism, it being obvious that concentrated

efforts are being made to solve this unhappy post-war problem. Council houses are not free from overcrowding and possibly it should be made a rigid and inflexible condition of the tenancy that the accommodating of a second family in a Council house without written authority, would result in legal action for the possession of the premises. A legal instrument should be signed, binding all parties and involving more than the mere passing over of a key and a rent card.

4. Housing Act, 1936.—Part IV.—Overcrowding:

(1) (a) Number of dwellings overcrowded at the end of the year (ESTIMATED)	436
(b) Number of families dwelling therein ...	526
(c) Number of persons dwelling therein ...	2,880
(2) Number of new cases of overcrowding reported during the year	5
(3) (a) Number of cases of overcrowding relieved during the year	3
(b) Number of persons concerned in such cases	18
(4) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	Nil
(5) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to Report.	

FACTORIES ACTS, 1937 and 1948

Part I of the Act

1.—INSPECTIONS for purposes of provisions as to health (including inspections made by Sanitary Inspectors)

Premises	Number on Register	Number of Inspections	Number of Written notices	Occupiers prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	14	25	2	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	41	120	—	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	2	6	—	—
TOTAL	57	151	2	—

Particulars	Number of cases in which defects were found
Unsuitable or defective	Found Remedied
	2 2

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BY-LAWS AND REGULATIONS

By-laws and Regulations are in operation for the controlling of common lodging houses, tents, vans, sheds, factories, workshops (including bakehouses), and the following offensive trades: Blood boiler, bone boiler, fell monger, tanner, leather dresser, soap boiler, tallow melter, fat extractor, tripe boiler, glue-maker, gut-scraper, and rag-and-bone dealers.

In addition to the above items, By-laws have been adopted in connection with Hackney Carriages, Cleansing of Footways, pavements, etc., Slaughter houses, Tents, Vans, Sheds and similar structures, Public bathing, Smoke Abatement, Registries for female Domestic Servants, Buildings, Queues for Public Vehicles and Section I, Slaughter of Animals Act, 1933.

It should be noted that legislation covering the sale and preparation of many foodstuffs are now for the most part regulated by Section 14, The Food and Drugs Act, 1938. The above-mentioned Section also covers the preparation and sale of ice cream, but at the moment there is no bacteriological standard for milk or ice cream and is a matter which should receive early attention.

SLUM CLEARANCE

To facilitate continuity in the records, and to enable Members of the Council to be afforded comprehensive information on the previous Slum Clearance activities, the following figures are appended. Slum Clearance demolitions and the rehousing of the occupiers of the demolished premises have now been resumed.

Slum Clearance Programme, 1934					Houses.
South Row, Newfield 1—26	...	...	...	...	26
William Street, Newfield 1—29	...	...	...	...	29
North Row, Newfield 27, 28, 29, 30, 31, 32	...	...	...	...	6
Club Row, Pelton Fell 4, 5, 6, 7, 8, 9, 10, 11, 12	...	...	...	...	9
Holme's Buildings, Pelton Fell Block Tenements and 2 houses.					2
Steele's Yard, Chester-le-Street 23, 24, 28, 29, 30	...	...	...	...	5

Slum Clearance Programme, 1935

West Terrace, Newfield 1—26	...	...	...	...	26
Middle Row, Newfield 1—16	...	...	...	...	16
West Row Newfield 1—18	...	...	...	...	18
Old Grange Terrace, Pelton Fell 9—20	...	...	...	...	12

South Burns, 18a, 18b, 21 and 23 (House and Shop), 25, 31, 32, 34, 36, 44, 46, 52, 54, 56, 58, 60, 62, 71, 73, 75, 77	21
Furnace Cottages	3

Slum Clearance Programme, 1936

Pelton Fell Area

Old Grange Terrace Nos. 63—74 inclusive	12
Pit Row (including Middle Pit Row) 1—26	26
Whitehill Terrace Nos. 1—14	14
Double Row Nos. 1—20	20
Wheatley's Buildings	3
Waverley Terrace Nos. 1—6	6
Stella View and Bateman's Cottages	14
Single Row, Newfield, Nos. 1, 2, 3, 4, 17, 18, 19, 20 ...	8
John Street, Nos. 1—26	26
Low Howlett, High Howlett, Teasdale's Buildings ...	20
Club Row, Nos. 1, 2, 3 and 5	4
Lonsdale Street, Newfield	22
Copelands Yard, Nos. 1—5	5
Queen's Head Yard, Nos. 1—6	6
Canada 23, 25, 27, 27a, 32a, 32b, 32c, 32d, 35, 36 ...	10
North Burns (including Old Mill Houses), 10, 13a, 13b, 14, 16, 29, 30, 32, 33, 34, 36, 37, 38, 39, 42a, 42b, 42c, 46a, 46b, 47, 48a, 48b, 50a, 50b, 51, 22a, 22b, 20	29
Pelaw Bank Nos. 2, 3 and 4	3
Wilson's Buildings (Bland's Opening) Nos. 14, 15, 16, 17, 18, 19	6
Bland's Opening (including Mission Hall), Nos. 1, 3, 5, 7	4
Edward's Square, Nos. 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	19
Curry's Yard (including Gospel Hall) Nos. 45a, 45b, 46, 47, 48, 49a, Middle Chare (Curry's Yard), 33 and 35	9
Nicholson's Buildings, 1, 2, 3 and 4	4
Stoddart's Buildings, 1, 2, 3, 4, 5, 6, 7, 8, 9	9
Burnside Cottages (South Burns), 1, 2, 3	3
Thompson's Square, 20, 22, 24, 26, 28, 30	6
Greenfield's Yard (South Burns), 1a, 1b, 2, 3, 4 and 5 ...	6

Slum Clearance, 1937

James Street, Newfield	...	...	...	...	...	28
Dean Street, Newfield	...	...	...	...	...	27
East View, Newfield	...	...	...	...	...	11
High Rows, Newfield	...	...	...	...	...	17
Poplar Street, Chester Moor	...	...	...	...	...	6
Rowe's Buildings, Chester-le-Street	...	...	...	...	...	6
Alexandra Place, Chester-le-Street	...	...	...	...	...	10
Robson's Cottage and Gut Scrapers	...	...	...	...	...	2
Mansell's Cottage, Bland's Opening	...	...	...	...	...	1
Cross Row, Pelton Fell	...	...	...	...	...	4
Pelton Level Cotts. Pelton Fell	...	...	...	...	...	2
Bank Top Cottage, Newfield	...	...	...	...	...	1

Slum Clearance Scheme, 1938

1—17, Old High Row, Newfield.

1—11, East View, Newfield.

1—27, Dean Street, Newfield.

Bank Top Cottage, Newfield.

1—4, Cross Row, Newfield.

8—14, James Street, Newfield.

21—28, James Street, Newfield.

Robson's Cottage and Mansell's Cottage, Bland's Opening.

Pelaw Square, South Pelaw 1—20 20

Hopgarth, Chester-le-Street 18—23, 25, 26 8

Store Opening, Chester-le-Street 8, 9, 10, 11, 16, 17, 12, 14 8

Albert Terrace, Chester-le-Street 1—7 7

Bland's Opening, Chester-le-Street 20, 21a and 21b ... 3

Edward Square, Chester-le-Street 28a, 28b and 29 ... 3

Mill Houses (Bland's Opening, Chester-le-Street) 7, 8,
10, 11, 12, 13 and 14 7

Low Chare, Chester-le-Street 3

Problem Families

Speaking on Mental Health at a Regional Health Course in December 1948, A. Kennedy, M.D., M.R.C.S., Professor of Psychological Medicine at Durham University made important and interesting observations on "Problem Families," in which he referred to those families of low mental capacity. "Pressure on these families leads to resentment," he stated. "Advice should be given in such a way as to be understood otherwise it will cause anxiety." Mr. Robert Oxen Black writing on the same subject observes, "Although some-

times possessed of a low cunning, it is generally found that one or both parents are of a mental stature below normal. The condition of the house and its meagre contents; the persons and clothing of the occupants vary from grubby to filthy in extreme and there is utter lack of system in domestic affairs. There are no regular meals, no regular washing or mending days, no regular cleaning days, and to the observer all is chaos. The children have no night attire other than their filthy underclothing and frequently stay in bed so late that they are rushed off to school without breakfast or do not attend school that day. It is a characteristic of the problem family that the number of children per family is large, and the number of children involved may be as high as 5% of the total child population." According to the same writer there are approximately 80,000 problem families in the whole of Great Britain.

There is no doubt that Problem Families are to be found in every locality and are a burden on the social services. We have all seen them. They comprise the negligent, lazy, indolent, indifferent and low mental mis-fits. The question arises, how shall we cope with these Problem Families whose numbers are becoming legion? When these obtain a Council house they become an increasing cause for anxiety, and misery, vermin and filth is a sure consequence. It is suggested that such families should be housed in second class property with reasonable amenities acquired by the local authority for that purpose, and there retained and trained until they prove themselves worthy of first class premises.

Housing Notes

During 1948 there were 159 houses completed in the Urban area. This figure includes 30 private houses, 36 Aged Persons' houses, 29 three-bedroom type Council houses, and 64 Prefabricated houses. These are all occupied, and a further 70 are now in the course of erection at South Pelaw. These are three-bedroom houses, and approval has recently been received for the erection of a further 86 houses of the same type. (July, 1949).

Miners' Hostel, South Pelaw

This Hostel, which comprises a number of hutments of the Nissen type, together with kitchen and administrative blocks, covers a considerable area. The premises are no longer in use as a Hostel, but are used by the Ministry of Food for storage purposes. It is considered that these huts, which are provided with good sleeping accommodation, could be put to better use or the site cleared and the land used for the erection of more Council houses.

Squatters' Huts

The Squatters huts at Roman Camp and Station Road are still occupied. One hut on the latter site recently became vacant and was at once demolished. The water supplies are obtained from a single tap in the washhouses at both hutments. The drinking water was recently subjected to bacteriological examination and was reported "satisfactory." Many of these huts admit the weather and show signs of rapid deterioration.

Rodent Control

In accordance with the requirements of the Ministry of Agriculture and Fisheries Circular No. 19, and similar directives, systematic treatment of sewers, sewage disposal works, and refuse tips for the purpose of Rodent Control has been carried out during the year under review. Private premises and factories have also been subject to disinfestation as required. The results, although not spectacular, are regarded as satisfactory. As will be understood dying rodents do not willingly present evidence of their impending demise.

Smoke Abatement

The Public Health (Smoke Abatement) Regulations 1926, are part of the duties of the Public Health Department. During the recent war, Smoke Abatement regulations were relaxed in accordance with the needs of War strategy and production. Increasing attention is now being directed to the reduction and abolition of atmospheric pollution, but many authorities in industrial areas are admittedly restricted in carrying out this important aspect of Public Health activities by reason of the inadequacy of the law of Smoke Abatement. Successful action against offenders will not be concluded if the defendants can show that they used the best practicable means to avoid smoke nuisances. On this subject, Post-War Building Studies No. 7 (Mechanical Installations and Solid Fuel Appliances) provide interesting data. More recently proposals have been submitted by the National Smoke Abatement Society in their Post-War Memorandum on Smoke Emission. Part of these proposals include new Draught Bye-laws under the Public Health Act, 1936, but are too lengthy to be included in this report. One outstanding feature is that "A breach of any bye-laws made by a local authority regulating the emission of smoke shall be a Statutory Nuisance." Mr. A. E. Snodgrass, M.R.San.I., A.M.I.S.E., in his work "The Problem of Smoke Emission" provides some very useful detail.

He writes "Smoke is the gaseous and solid products of combustion, visible and invisible, including minerals and other substances carried out into the atmosphere with the products of combustion. Legally smoke includes soot, ash, grit, and gritty particles. . . . Smoke nuisances arise from the imperfect burning of coal due to the incomplete burning of hydrocarbon gases. The majority of the boiler plant in this country is hand-fired Lancashire boilers and the common excuse for black smoke is to blame bad firing or the inadequacy of the plant. *Grit*—most types of mechanical firing incorporate some form of mechanical draught, and if the draught and the stoker are not correctly adjusted and suitable fuel used, the grit nuisance may be serious due to small particles of unburnt coal and ash passing up the chimney. . . . The only remedy is the installation of some form of grit arresters. These are of three types. In order of efficiency they are:—Wet baffles, Cyclones, and Electrostatic Precipitation. As usual, the most efficient is the most expensive. During the last seven years the greatest cause of black smoke has been the difficulty of obtaining suitable fuel for the particular boiler plant." The same writer also considers under the heading of Domestic Smoke that "the burning of coal in the ordinary house fire grate is most unsatisfactory, inefficient and wasteful."

With regard to industry, it may be said that the most reliable and lasting remedy is to increase the number of power (electric) operated factories and to increase and further the adoption of district heating to eliminate domestic pollution. Locally there is only one factory where some smoke pollution has been in evidence and where the owner is now contemplating introducing new plant. Our most recent factory is all electric. It is a modern building and is far from being the unsightly erection so evident in other times. It is so clean and quiet that the adjacent residents are hardly aware of its existence.

Colliery Spoilbanks

As in other mining areas, the burning spoilbanks has become something of a problem. Mr. G. W. Tate, F.S.I.A. (Silver Medalist) has made a special study of this nuisance and his observations are worthy of reference. "Colliery Spoilbanks appear to be regarded as the inevitable end product of coal mining, and are usually of three types; the conical heap fed by a railway or aerial ropeway, the flat heap where the material is trucked and spread, and the ridged and continuous chain of heaps fed by an aerial ropeway. Space consideration tends to popularise the conical type of heaps which are most unsightly and present special difficulties if they fire. . . . Many attempts have been made to extinguish or control burning spoilbanks, and a reasonable degree of success has been attained in a number of cases where efforts have been per-

sistant. . . . Refuse containing soft coal appears to be most troublesome and liable to spontaneous heating, which, once commenced and aggravated by broken timber and other combustible material is liable to create fires, the oxygen intake increasing as the temperature rises. . . . Another contributory factor to the trouble is that not all the collieries have sufficient screens and washery plants, with the result that too much combustible material finds its way on to the heap and perpetuates the nuisance. H. Price, Esq., B.Sc., in a paper given to the Institution of Mining Engineers affords valuable guidance on the treatment of burning pit heaps and this constructive advice is regarded as most valuable. Mr. Tate quotes this treatment "Clay puddled and sprayed as a blanket, or grouted and forced by pressure into the heap Blanketting by slag dust . . . sand applied to the burning spoilbank by spraying. . . . Limestone and water." "In this district (Ashington) the method of dealing with burning spoilbanks is exclusively that of treatment by water (writes Mr. Tate). Water is pumped about two miles from the river for general colliery use, included in which is the pithead baths water. . . . Water spraying has been found to be successful in controlling fires if properly and energetically (and continuously) applied. . . . Old props, broken timber and slab wood should not be allowed to find its way on to the heap but should be salvaged and reprocessed for fibre board. . . . High class fibre board can be made from firewood and wastes for woodworking, the benefit therefrom being twofold—reduction of danger from fire on spoilheaps and the production of valuable material for building works. If spoilbanks are avoidable, what then can be done with the refuse? (asks Mr. Tate). Three methods readily present themselves for argument, namely storing back in voids underground, tipping at sea, and research in the approved 'back room' fashion."

From the wealth of valuable material quoted above, it appears obvious that the best and cheapest method readily available in each case should be applied to the burning spoilbank. All combustible material in the form of old pit props, etc., should be salvaged and as far as possible, mining waste should be "packed in the gob" otherwise stored in the voids underground from which the coal has been removed. One indisputable fact emerges from this contribution, that those who are forced to live in proximity to burning spoilbanks should be relieved at all costs from the effects of this intolerable nuisance.

Ice Cream

One local authority has been informed by the Ministry of Health "No bacteriological test has yet been evolved which would justify its use as a statutory test." That is the position of the law at the moment. The Ministry of Food circular M.F.3/49 does,

however, afford additional powers regarding Sampling and the minimum fat content of Ice Cream from manufacturers who give the required undertaking. There is always the unpleasant possibility that in some obscure back street in the larger cities, there are itinerant ice-cream traders avoiding the Heat-Treatment Regulations. The obvious danger of such nefarious vendors is much more likely in the congested slums of the large towns. At least one outbreak of Typhoid in a London Borough was traced to ice-cream within recent months. There are three Registered Ice-cream Factories in the Chester-le-Street Urban area, and all are equipped with the most modern and elaborate appliances for the manufacture of this popular confection.

Camping Sites, 1948

Number of sites which were used for camping purposes during the year—1.

Number of camping sites in respect of which licences have been issued by the local authority under Section 26 of the Public Health Act, 1936—Nil.

Estimated maximum number of campers resident in the area at one time during the summer season, 1947-48—13. There were 3 Caravans at the Buckles in July, 1948.

Common Lodging Houses

There are at present no Registered Common Lodging Houses in the Urban area. It would appear that the mobile workman now naturally prefers to use Hostels where available and the regular type of casual is disappearing from the usual haunts.

Disposal of the Dead

The public mortuary is situated in the Cemetery ground and to which access may be obtained both from the main entrance gates in Ropery Lane and from Lancaster Terrace. It is gathered that one Yorkshire City Council has recommended the introduction of free cremation and there is no doubt that cremation should be more generally recommended. Cremation is also important from a public health aspect. Valuable land for house building may be saved if cremation were more general. The National Health Act may well extend its vast scope to include cremation and also the provision of mortuary facilities for the dead from inconvenient, congested and overcrowded homes. There should be no need for dead bodies to remain under such conditions in dwelling-houses for several days until the appointed day of the funeral—sometimes prolonged to enable the largest number to attend the obsequies.

Milk Supply

It is not within the province of this report to express views on shortages or distribution because the local milk supply has been largely influenced by the national scheme for distribution under Government direction, but out of this control has emerged valuable new legislation and technique which includes the Milk (Special Designations) Bill of 1948, which now ensures that milk falls within the safe categories of tuberculin tested, accredited, pasteurised or heat treated (sterilised). It is confidently expected that within five years all milk in Britain should be pasteurised or tuberculin-tested, after which the category accredited will be withdrawn or will disappear from the recognised designations. There is no doubt that in view of the existing numbers of milk producing cows which are affected with tuberculosis, pasteurisation presents a valuable and reliable defence against the spread of bovine tuberculosis, but this mechanical interference with a natural food product is regarded by some as a doubtful remedy. The real and lasting remedy is the development of the tuberculin-tested tubercular free herds.

There are 21 purveyors registered to supply milk in the Urban area, and large quantities of pasteurised and heat-treated milk is purveyed throughout the district. The following are the farms in the Chester-le-Street Urban District:—

- (1) High Flatts Farm;
- (2) Chester Moor Farm;
- (3) Whitehill Farm;
- (4) Dove Cote Farm;
- (5) Hermitage (Garden House) Farm.

During the period under report there were 19 samples of milk submitted for bacteriological examination for cleanliness, etc., and of these the results of 3 were excellent, 12 were good, and 4 were unsatisfactory. Suitable action with regard to the latter subsequently produced better samples. One new dairy at Poplar Street has commenced operations and one dairy at Finchdale Terrace has ceased business.

Much importance has been rightly attached to the new wonder drug "Antricide" which veterinary science claims will free cattle from sleeping sickness which destroys large numbers of cattle in certain parts of Africa. This drug was discovered by "back-room" scientists in Manchester University and in Africa who were engaged in research on this treatment. It has been described by Mr. D. R. Rees Williams, Colonial Secretary, as "one of the great achievements of science." As a result of the use of "Antricide" it is considered possible that 2,000,000 head of cattle will be raised next year in previously uninhabitable Africa.

True, Africa is many thousands of miles from these shores, but with modern methods of transport, the potentialities of this discovery may mean an increased meat supply and will fill the gap in local shortages and probably permit of further research into our own national enemy, namely bovine tuberculosis.

Meat Inspection

The Ministry of Food Regional Slaughterhouse is situate at the rear of the Chester-le-Street Co-operative Society's establishment and was hitherto used by that Society as a Slaughterhouse. Cattle for both the Chester-le-Street Urban and Rural Districts are dressed at this Centre. It is considered increasingly necessary that there should be departments for the inspection of diseased meat and separate slaughtering bays for casual animals. The latter must always be regarded as suspect, and immeasurable damage may be caused by contact between healthy animals and these suspects. There should also be provided suitable washing and cleansing facilities for members of the slaughterhouse staff.

	Cattle Excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Numbers Inspected ...	200	315	22	1,801	22
All diseases except T.B.					
Whole carcasses con- demned	—	4	5	3	—
Carcases of which some part or organ was con- demned	50	139	—	8	—
Percentage of the num- ber inspected affected with diseases other than T.B.	25 %	45.3 %	13.6 %	0.61 %	—
T.B. only. Some car- cases of which part or organ was condemned	14	60	—	—	—
Percentage of number inspected affected with T.B.	7 %	19.04 %	—	—	—

Unsound and Diseased Meat Destroyed

As a result of meat inspection, the following quantities of meat were found to be diseased, or otherwise unsound, and were removed by the staff of the Ministry of Food for salvage purposes:—

					Cwts.	qrs.	lbs.
January	...	...	...	...	5½	—	—
February	...	...	...	...	1	—	—
March	...	...	...	...	3	—	12
April	...	...	...	...	8	1	2
May	...	...	...	...	5	—	16
June	...	...	...	...	5	—	8
July	...	...	...	...	11½	—	6
August	...	...	...	...	2	—	4
September	...	...	...	...	11½	—	4
October	...	...	...	...	9	—	22
November	...	...	...	...	9	—	12
December	...	...	...	...	9½	—	20

The above figures make a total of 3 tons 11 cwts. 1 qr. 22 lbs. of meat destroyed during the year 1948. Many of the casualties were of inferior quality. Chief cause of condemnation was tubercúlosis. Distomata and other hepatic diseases were responsible for a large number of bovine livers. Sheep were found to be entirely free from Tuberculosis, but prone to parasitic infections. It is again possible to report that no Foot and Mouth Disease, Anthrax or Swine Fever was discovered during meat and cattle inspections. All the animals sent in under the Disease of Animals (Tuberculosis) Order, 1938, established the presence of the disease. The utmost harmony and co-operation prevailed between your own Inspector and the staff of the Ministry of Food and the Ministry of Agriculture and Fisheries.

Food and Drugs Act, 1938 (Other Food Destroyed)

During the year 1948 canned and preserved foods amounting to 12½ cwts. 1 qr. 4 lbs. were found to be unsound and unfit for human consumption. Inspection revealed that the chief causes of unsoundness were (1) careless and incomplete sealing of the cans, and (2) flimsy packing. On several occasions it was found that nails used in boxing the canned goods were driven straight through the boxes into the tins causing them to leak, admit air and produce unsoundness. As a result of persuasion and persistent representations many of the food shops have now installed refrigerators.

Shops

Many of the shops which became vacant during the War are again engaged in business. There are approximately 200 shops in this Urban area, and of these about 37 have living apartments attached. As a result of alteration and adaption, some of this living accommodation is difficult of access and otherwise unsatisfactory.

Inspections were chiefly directed to food selling establishments and many of the latter now provide washing facilities and also rest-rooms for the female staffs.

Chemical and Bacteriological Examination of Food

There have been many changes in the procedure under the above heading. Much of the Chemical and Bacteriological examination of food and water is now done at the Ministry of Health, Public Health Laboratory at Ponteland. The premises of the County Analyst are situated at Darlington.

SANITARY CIRCUMSTANCES OF THE AREA

References and Acknowledgments

Water Supply in the County of Durham.

A. B. E. BLACKBURN, B.Sc., M.Inst.C.E., F.G.S.

Sewage Disposal.

A. P. I. COTTERELL, M.I.C.E., F.S.I., F.R.San.I., etc.

C. LUMB, B.Sc., F.R.I.C.

Pollution of Streams.

D.S.I.R., His Majesty's Stationery Office.

Refuse Disposal.

JOHN AMES, M.I.P.C.

Public Cleansing.

H. ARDEN, M.B.E., A.M.I.Mech.E.

C. E. BOAST, M.I.C.E., F.R.I.C.S., M.I.Mun.E., F.Inst. P.C.

Materials for Sanitary Fittings.

A. F. NALL, A.M.I.S.E., A.M.Inst.W.

Pestology—Synthetic Insecticides.

D. L. DAVIES, Imperial Chemical Industries, Ltd.

“The Man with the Cap.”

By the Right Hon. J. J. Lawson, M.P.

Problem Families.

A. KENNEDY, M.D., M.R.C.S.

Smoke Abatement.

Post War Studies No. 7, His Majesty's Stationery Office.

Colliery Spoilbanks.

G. W. TATE, F.S.I.A.

Cattle Diseases—Antitoxin.

Dr. F. S. H. CURD.

Dr. D. GARNET DAVEY.

Milk Supply.

WILLIAM GOLDIE, M.A., M.B., M.R.C.P.

Prevalence of, and control over Infectious and other Diseases.
Notifiable Disease (other than Tuberculosis) during the year

Disease.	Total Cases Notified.	Cases admitted to Hospital	Total Deaths
Measles	227	2	—
Pneumonia	15	6	6
Diphtheria	3	3	—
Scarlet Fever	56	53	—
Erysipelas	2	—	—
Whooping Cough	21	4	—
Cerebro-Spinal Fever	2	2	—
Puerperal Pyrexia	1	1	—
Enteritis	2	2	—
Ophthalmia Neonatorum	1	1	—

The notifiable infectious diseases are the subject of quarterly returns to the Registrar General (118d) with a similar one to the County Medical Officer (118e) showing any corrections of notifiable infectious diseases during the quarter, and the above figures are based on these returns.

AGE DISTRIBUTION OF CASES.

Age Group.	Measles	Pneumonia	Diphtheria	Scarlet Fever	Erysipelas	Whooping Cough	Cerebro- Spinal Fever	Puerperal Pyrexia	Enteritis	Ophthalmia Neonatorum
Under 1 year	8	3	0	0	0	3	1	0	0	1
1 year	39	1	0	1	0	3	1	0	0	0
2 years	35	2	0	4	0	5	0	0	0	0
3 „	29	0	0	3	0	6	0	0	0	0
4 „	32	0	0	3	0	3	0	0	0	0
5—9 years	74	1	1	17	0	1	0	0	0	0
10—14 „	5	0	0	13	0	0	0	0	0	0
15—19 „	4	0	1	8	0	0	0	0	0	0
20—34 „	1	1	0	7	0	1	0	0	2	0
35—44 „	0	3	0	0	1	0	0	1	0	0
45—64 „	0	2	1	0	1	0	0	0	0	0
65 yrs. & over	0	2	0	0	0	0	0	0	0	0

MONTHLY INCIDENCE OF CASES.

Disease.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Measles	2	2	5	18	44	94	37	4	13	1	2	5
Pneumonia	2	3	0	5	0	1	0	0	0	0	1	3
Diphtheria	0	0	1	0	0	0	0	1	0	0	1	0
Scarlet Fever	4	1	12	5	6	6	3	1	6	8	3	1
Erysipelas	0	0	0	0	0	1	0	0	1	0	0	0
Whooping Cough	0	0	4	4	1	4	2	0	6	1	0	0
Cerebro-Spinal Fever	0	0	1	0	0	0	0	0	0	0	0	1
Puerperal Pyrexia	0	0	1	0	0	0	0	0	0	0	0	0
Enteritis	0	1	0	0	0	0	0	0	0	0	0	1
Ophthal. Neonatorum	0	0	0	0	0	1	0	0	0	0	0	0

OPHTHALMIA NEONATORUM.

CASES			Vision Un-impaired	Vision Impaired	Blindness (Total)	Deaths
Notified	Treated					
	At Home	in Hospital				
1	—	1	—	—	—	—

ACUTE POLIOMYELITIS

It will be recollected that during 1947 when a high incidence of Poliomyelitis was recorded in England and Wales that the Chester-le-Street Urban area shared only mildly in this connection, 5 cases being notified during the months of July to September, 1947. It is pleasing to report that during 1948 no notifications of this disease were received.

TUBERCULOSIS

Notifications and Deaths in the Urban area during the years:
1944, 1945, 1946, 1947, 1948.

Year.	Notifications.	Deaths.
1944	23	4
1945	26	9
1946	18	5
1947	15	9
1948	12	8

New Cases and Mortality During the Year

Age Periods	New Cases.				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 yr.	...	...	...	...	...	...	...	...
1—5	...	...	1	...	...	...	...	...
5—15	...	2	1	...	...	...	1	...
15—25	1	2	...	...	...	1	...	1
25—35	2	1	...	...	1	...	1	...
35—45	...	1	...	...	1	...	...	...
45—55	...	...	...	1	...	...	...	...
55—65	...	...	...	...	2	...	...	...
65 and over	...	...	...	..	...	...	...	...
Totals	3	6	2	1	4	1	2	1

Since the last report there have been further evolvments in the use of Streptomycin in the treatment of Pulmonary Tuberculosis and the Medical Research Council have carried out an investigation and record the results of a carefully controlled trial of the drug in 107 patients. 1 Group—55 receiving 2 grams of Streptomycin a day for 4-6 months and the other group receiving no treatment except complete bed rest. At the end of six months 7% of the treated patients and 27% of the controlled patients died, and in 51% of the treated cases considerable radiological improvements occurred as against only 8% in the controlled group. It appeared to be relatively more effective in those that were acutely ill on admission, most improvement being noted in the treated cases in the first three months after which many began to deteriorate. Sputum became negative in 8 of the group treated with Streptomycin and 2 in the controlled group. An important fact evolved was that in 35 cases out of 41 strains of Tuberculous bacilli became resistant to the drug usually during the second month of treatment and this would appear to be the probable cause for much of the deterioration which was seen after the initial improvement.

Streptomycin is valuable also in the treatment of Tuberculous Bronchitis and Tracheo-Bronchitis and gives symptomatic relief in cases of Laryngeal involvement. It is of considerable value in Miliary Tuberculosis and Tuberculous Meningitis.

With regard to Para-aminosalicylic acid there are reports of clinical trials using this drug in patients with extensive bilateral disease, the duration of the treatment being three months, and it is generally concluded that whilst some benefit was observed in relation to relief of symptoms, reduction in temperature and Toxaemia generally, only slight radiological improvement was observed in a few cases and it does not appear that the prognosis has been much altered materially by the administration of the drug. This symptomatic relief and reduction of Toxaemia and Sputum, etc., has been noted in several cases treated under the auspices of the Chest Clinic, and in Chester-le-Street Isolation Hospital and Sanatorium but again little, if any, change has been seen in the radiological picture after 3 months course of treatment, but it is considered that the drug is of some value in reducing the amount of Sputum and Cough and thereby reducing to some extent the possibilities of infection to others and in this connection would appear to be of some value in the treatment of cases awaiting sanatorium.

Calciferol (Vit. D.2) Therapy continues to be of the greatest value in the treatment of Lupus and allied conditions, Scrofuloderma, etc. It is also valuable in the treatment of Tuberculous cervical glands, Tabes Mesenterica and is given routinely in cases of bone and joint Tuberculosis. Provided no associated lung lesion is present it is given to adults in dosage of 100,000 i.u's. daily and to children in 50,000 i.u's daily. It must be given with caution in non-pulmonary cases with associated lung lesions, but in a few cases of this type, in adults, some remarkably good results have been achieved with a reduced dosage of 50,000 i.u's daily only, with healing of the non-respiratory lesions. It has proved of little or no value in the treatment of respiratory disease *per se*. It can be used alone for the treatment of non-respiratory lesions or combined with Ultra-Violet Ray Therapy.

Within recent times consideration has been given by the Joint Tuberculosis Council on the question of protection of organised groups of children from the risk of infection by adults suffering from Tuberculosis. Among such children infection may arise as a result of child-to-child infection or from adults and existing regulations, which chiefly apply to infection in schools, are inadequate. The Council recommend that all persons employed in close contact with children should have, on engagement, a comprehensive medical examination which should include an examination of the lungs, which latter should be repeated annually. Any adult suffering from such disease and so engaged should not return to duty until two certificates at an interval of six months, based on X-ray examinations (bacteriological and clinical) can be submitted stating that the disease is quiescent. Subsequent certificates issued at three-monthly intervals for one year and six-monthly inter-

vals for a further two years, are recommended. This should apply to all professions in close contact with children.

In childhood great stress should be laid on the dangers of infection from adult cases, hereditary disposition being regarded as of secondary importance. It is in this connection that B.C.G. vaccine could be particularly employed as it may eventually emerge as a valuable ally in the field of prevention and in the protection of children exposed to particular risk.

Great interest has evolved in the use of B.C.G. vaccines since the international B.C.G. campaign was commenced by the Danish Red Cross in the Spring of 1947, and has lately been described by Ustvedt, who is its technical director in Europe. Since last March this international campaign has been conducted by the Swedish Red Cross, the Norwegian Aid to Europe Organisation and the World Health Organisation in co-operation with the Governments concerned, health authorities and Red Cross Societies in various Countries. The chief object of the campaign will be the Tuberculin testing of every one up to the age of 18 years and the B.C.G. vaccination of all negative reactors. This will involve in Europe alone the testing of some 40,000,000 people and probably about 1/3rd of these will be vaccinated with B.C.G. To further this end controlled experiments in this country in groups exposed to particular risk should be considered.

It is important to remember that although the actual cure for Tuberculosis still eludes our grasp it is an undoubted fact that within recent years great and important strides have been made towards this end especially with regard to new drugs such as Streptomycin, and also in the field of surgery where much has been done, and is still being done, to control the disease by Thoracoplasty and other surgical procedures.

The introduction of Mass Miniature Radiography also represents another powerful weapon in the early detection of cases, in some instances before any symptoms have occurred. This precaution too should never be neglected that where a case of Tuberculosis has occurred in a family it is most desirable that the remainder of the family should be X-rayed and the children's skin tested with the least possible delay, which can easily be arranged by reference from the family doctor to the Chest Physician at the nearest Chest Clinic. It can be seen therefore how important it is that all Chest Clinics serving large populations, should have all up-to-date facilities, including X-Ray and Screening units, so that full investigations may be carried out without delay.

The Mass Miniature Radiography Units continue to render valuable service in undertaking the mass X-Ray of factory workers and the general public. Close co-operation exists between these units and the Chest Physicians at the various Chest Clinics. In stressing

again for the public to make the fullest use of facilities for early diagnosis it is again emphasised that there is an urgent need for bringing the facilities at the Ropery Lane Chest Clinic completely up-to-date, which would be a great boon to this clinic which serves a large population, and would lead to a quicker turn over of patients and provide the population of the area with a completely efficient Chest Unit. In addition it would also avoid the mental anxiety which is often occasioned by prolonged waiting for the results of X-Ray examinations.

In England and Wales the deaths from Tuberculosis fell in 1948 as opposed to the Cancer Death Rate which remained unchanged.

There were 11,314 deaths in men from respiratory Tuberculosis which represents a rate of 555 per million as compared with 595 in 1947. For women the rate rose from 345 in 1946 to 364 in 1947 and declined in 1948 to 335 per million, and the number of deaths among women was 7,487. The corresponding rates from all other forms of Tuberculosis being 72 and 62 respectively which showed a decrease from the previous rates for both sexes which were 87 and 73 respectively. These figures are interesting in that, despite the greater facilities for diagnosis now existing, i.e., Mass Miniature Radiography, etc., and the consequent increase in the number of notifications of the disease, the trend is towards a fall in the death rate for both sexes.

The problems of Rehabilitation and Resettlement in suitable occupations of cases of Tuberculosis patients is a matter which is still exercising the minds of all those who have the ultimate welfare of this type of case at heart.

The greatest obstacle to the final resettlement of these persons is the chronic nature of the disease and the frequency of relapse which even under relatively good conditions is most common in the first 12 to 18 months after resuming work. It is most important, therefore, that during this period there should be opportunity for shelter and light employment and the avoidance of their return to the stringencies of the competitive conditions of the open labour market until they have proved their fitness to do so. The three main avenues for employment are those in the Sanatorium itself, the Tuberculosis colony and the various schemes of rehabilitation which culminated in the Disabled Persons Employment Act, 1944. Under this Act disabled persons register with the Labour Exchange and this registration opens the door to a wide choice of suitable jobs and appropriate training. The Quota schemes require every employer with 20 or more workers, to employ a certain quota, at present 3% of Registered Disabled Persons. The Disabled Persons

Corporation set up under the Act is specially concerned with the provision of sheltered employment in "Remploi" factories, a number of which have already been brought into operation and plans are now being developed for erecting some of these factories exclusively for tuberculosis patients of the chronic infective type. For those who live too far away or for other reasons cannot leave their homes, a scheme is now in process of development where they can be trained to do certain classes of work in their own homes. Finally there is the question of the provision of education courses for patients. This is being widely developed in the United States of America especially in the Montefiore Hospital, New York, where some 40% of the patients are engaged in such courses. Its usefulness is undoubted not only in the provision of a possible future occupation, but also because it enables the patient to become busy with something which is not confined to the lives of those who are ill and can assist in weaning them from the anxiety and insecurity which this chronic illness breeds.

In view of the importance of good housing in the fight against the Tuberculosis problem it is of first importance to record a noteworthy decision by the Chester-le-Street Urban District Council in November, 1948, to allocate 5% of all new houses erected by them to applicants on Tuberculosis or other medical grounds on the recommendation of the Medical Officer of Health. Although a most progressive step forward the allocation is so small that in my opinion it cannot exert any appreciable effect on the Tuberculosis problem locally and it is strongly recommended that the Council should give their early consideration to increasing the allocation.

As illustrating the use of X-Rays taken in the diagnosis of Tuberculosis, I quote the figures of the numbers of X-Rays taken in connection with the Durham County Council.

1939	...	...	...	...	...	1566
1940	...	...	...	...	...	1873
1941	...	...	...	...	...	2415
1942	..	...	...	...	...	2955
1943	...	...	...	...	...	4891
1944	...	...	...	...	...	6272
1945	..	...	...	...	...	5500
1946	...	...	...	...	...	7099
1947	...	...	...	...	...	8226
June 1948	..	...	...	...	...	5568

It is to be noted that the figures for X-Rays taken in 1948 include only those taken under the auspices of the Durham County Council Scheme for the first six months since the Tuberculosis Services were transferred to the control of the Regional Hospitals Board on 5th July, 1948.

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Since the 5th July, 1948, financial allowances and payments to Tuberculosis patients has been carried out by the National Assistance Board, under the National Assistance Act, 1948, which came into operation on the 10th June, 1948; the headquarters for this area are at Annfield Plain, Co. Durham.

The following statement gives particulars of allowances granted to tuberculosis patients during the six months ended 30th June, 1948:—

Type of Payment.	Last Quarter in 1947	New Cases.	Renewals.	Terminations.	Suspensions.	Amount		
						£	s.	d.
1. Maintenance Allowances	308	233	79	101	323	12140	9	9
2. Discretionary Allowances	21	78	...	...	25	158	5	6
3. Travelling Expenses	10	23	...	...	29	52	13	6
4. Domestic Help	1	...	...	...	1	7	0	0
5. Pocket Money.	5	5	...	...	7	39	10	0

No action was taken during 1948 under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under section 127 of the Public Health Act, 1936.

National Assistance Act, 1948 — Section 47

During the year under review no action was taken by the Council under the above section but at the time of drawing up this report action is pending in two cases.

GENERAL OBSERVATIONS

For the year under review the vital statistics remain satisfactory. The incidence of measles remains practically the same but Scarlet Fever shows some slight increase, although the cases were of a relatively mild type. The local incidence of Diphtheria notifications continues to fall and for a further year no deaths were recorded in the area. No cases of acute Poliomyelitis were recorded to the department during the year under review.

Progress continues in the search for an effective weapon against Tuberculosis and in connection with the elimination of Tuberculosis of Bovine origin attention is drawn to the Milk (Special Designations) Bill previously mentioned in the report. It is pleasing to record that a considerable quantity of the milk coming into the district is received from the up-to-date plant provided by the Milk Marketing Board at Langley Moor, Durham.

Important changes have occurred in the provision of health services of the area pursuant to the changes under the National Health Service Act, 1946, to which attention is drawn in the report.

The sincere thanks of the department is recorded to the General Practitioners of the area for their co-operation at all times especially in connection with the Diphtheria Immunisation scheme.

